

Order No.: DD+DIS217.98E



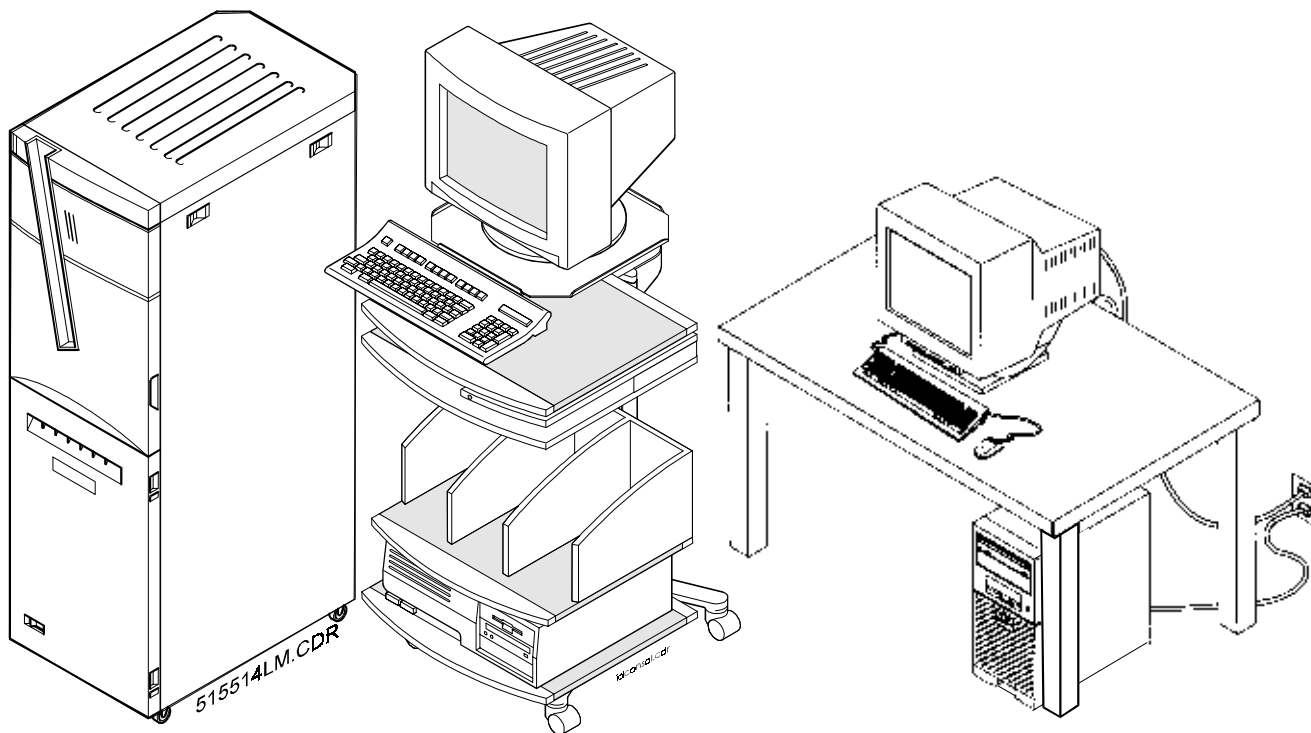
1 Piece Q7WGY Ma1

ADC Solo System

INSTALLATION PLANNING and Specifications

1st edition

Hardware Version ADCS 99.02



ADC Solo
Digitizer
Type 5155 / 100
Base: VME

Preview- /
ID- Station
Type 4406 / 821
Base: PC

Processing
Station
Type LASP6 / 009
Base: Ultra Sparc 10

The Installation Planning Instructions are separately available.
Order No: DD+DIS217.98E

printed in Germany

Caution:

This system uses high voltage. Please observe the respective safety regulations.

These instructions describe adjustments and routines which must only be performed by qualified technical personnel.

Note:

Electrical connections and repairs must only be made by authorised electricians.

Mechanical connections and repairs must only be made by authorised technicians.

CE Declaration:

According to the medical regulations the CE Declaration (CE Conformity) becomes void if the product is changed without prior consent of the manufacturer!

This applies to all parts and not only to the safety relevant parts!

We reserve the right to change data and characteristics in the light of technical progress.

Section 14

List of contents

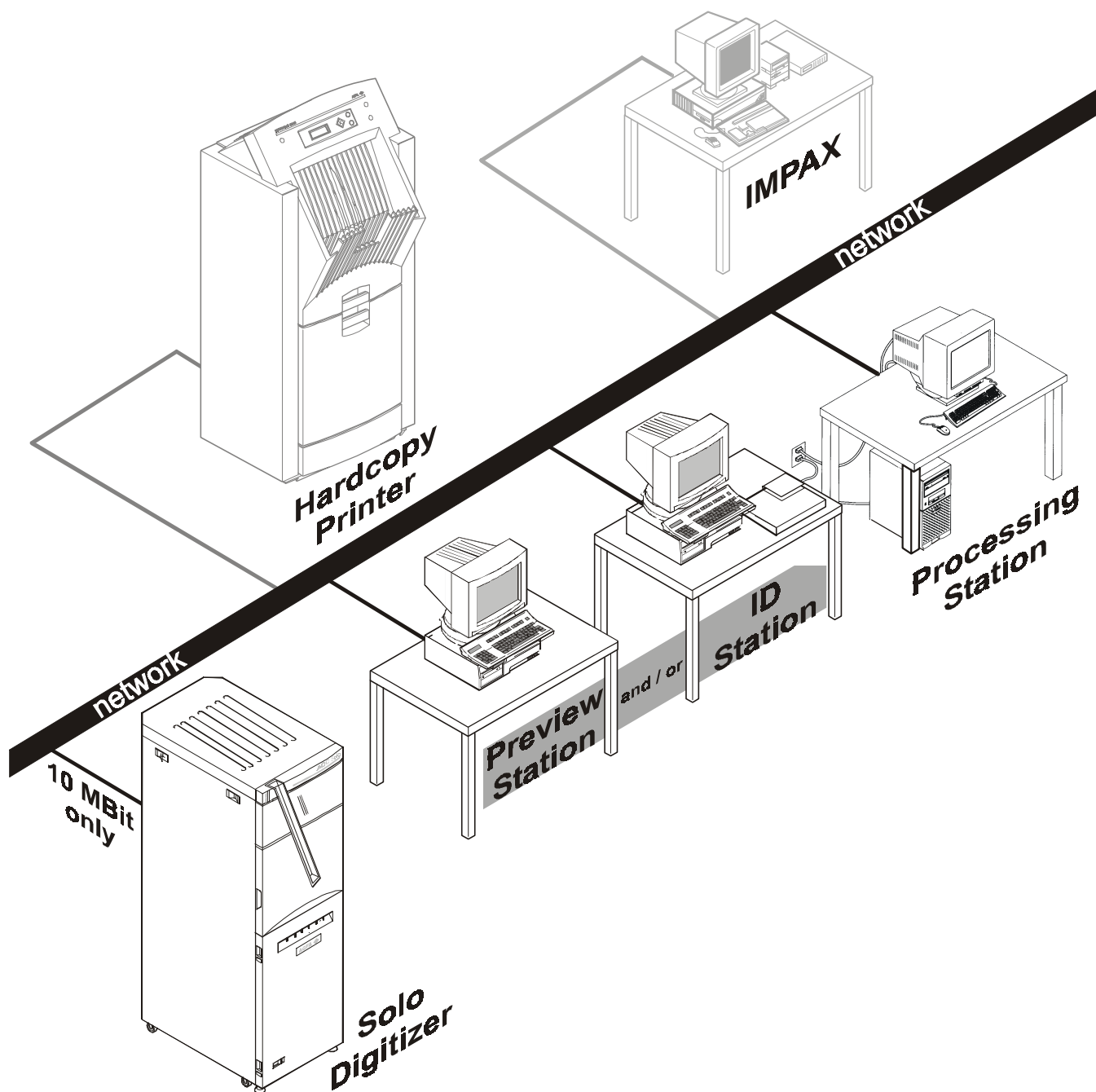
Part 1: Installation planning.....	1
System overview	1
Machine dimensions / Access for repair and maintenance	2
ADC Solo Digitizer	2
ID Station	3
PRID.....	3
Preview Station (PC)	4
Processing Station (Ultra Sparc 10).....	4
Hardcopy printer.....	4
Electrical connections of the system components	5
Mains connection:	6
Connection to an outlet.....	6
Connection cable	6
ADC Solo Digitizer.....	7
ID - Tablet	7
Transport path for ADC Solo Digitizer	8
Transport path for other ADC Solo System Components	8
Ambient conditions of the System component ADC Solo Digitizer	8
Part 2: Network planning	9
Dedicated network for ADC Solo System.....	9
Integration into an existing / new network.....	10
Part 3: Specifications	11
Delivery modalities	11
Minimum Hard- and Software requirements	11
Type overview	12
Scope of delivery	13
Connection cables of the individual system components	15
Electrical Data:	16
Power consumption :.....	16
Leakage current toward earth connection	16
Packing dimensions:	16
Weights:.....	16
Climatic data.....	17
Safety regulations	18
Checklists for the responsible installation person.....	1



For Technical data of the commercially available devices as PCs and Workstations please refer to the corresponding user manuals!

Part 1: Installation planning

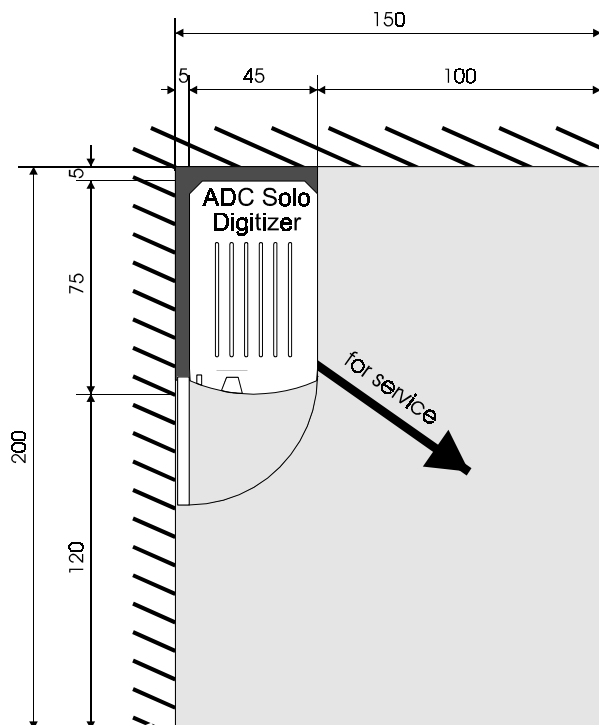
System overview



515514CM.CDR

Machine dimensions / Access for repair and maintenance

ADC Solo Digitizer



Free space as shown in the drawing must be reserved for repair and maintenance.

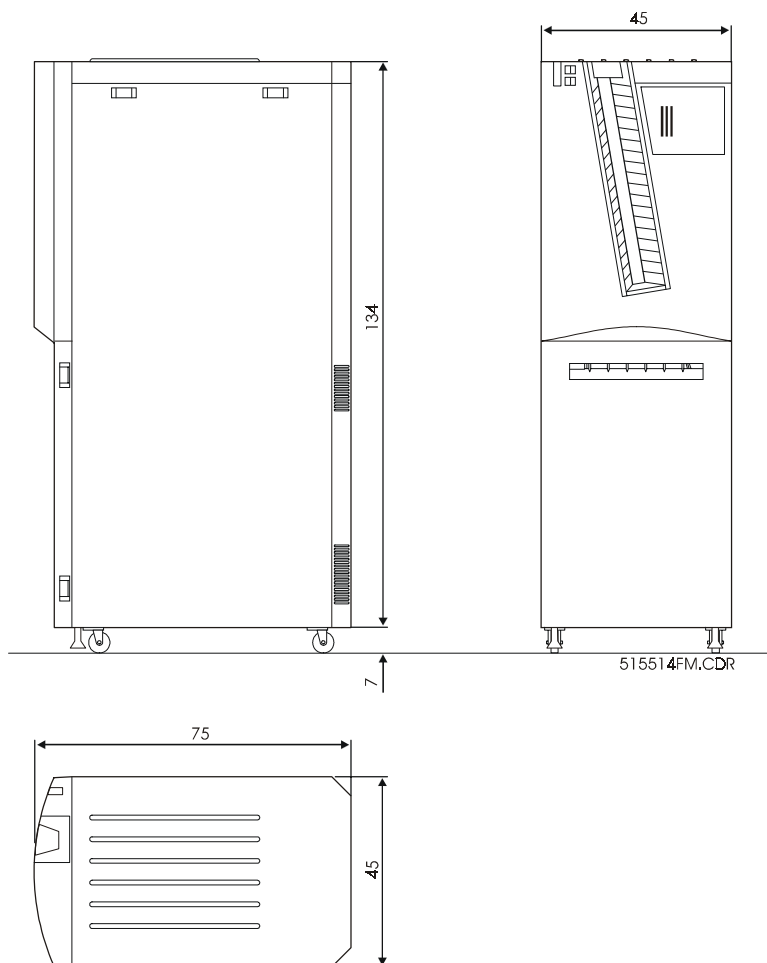
Less space may result in longer repair times!



Recommended free space for the ventilation, Power and Ethernet connection.

All dimensions in cm

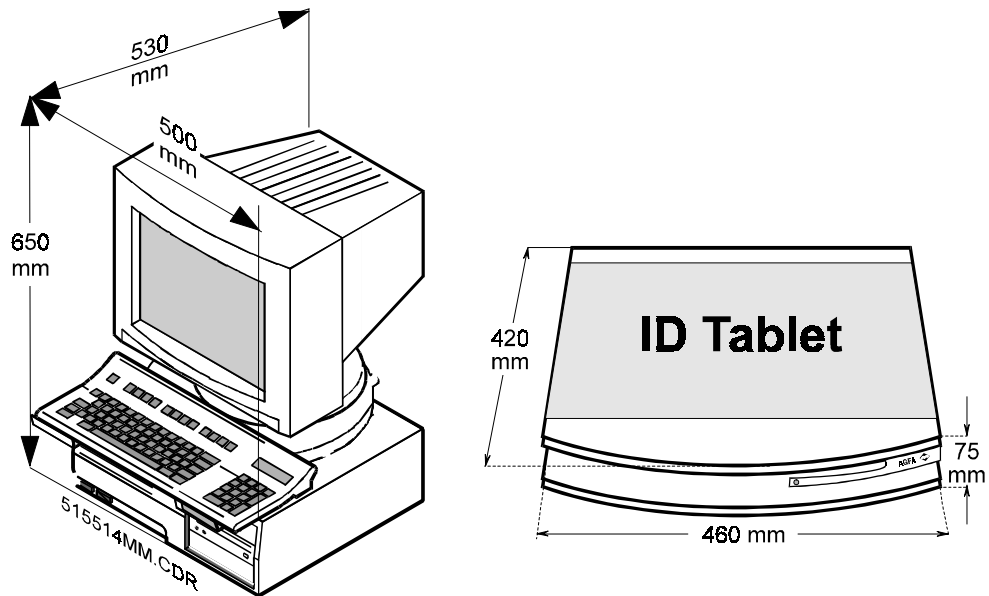
515514BM.CDR



515514FM.CDR

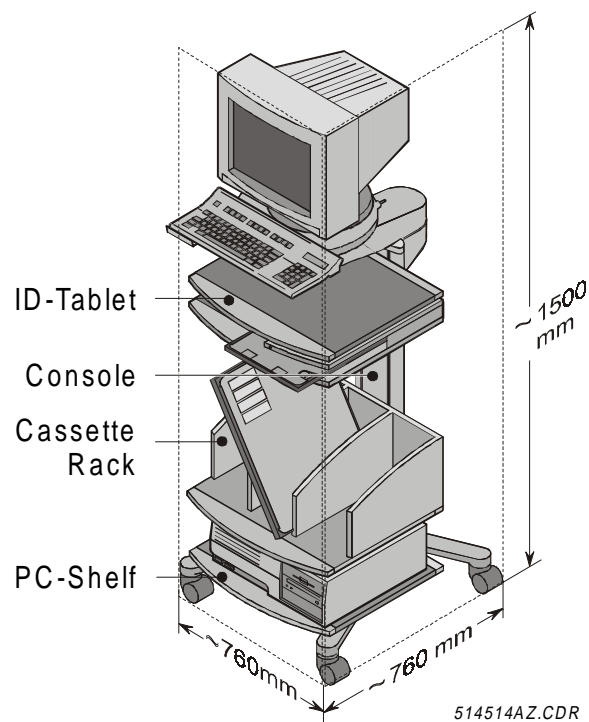
Machine dimensions / Access for repair and maintenance

ID Station



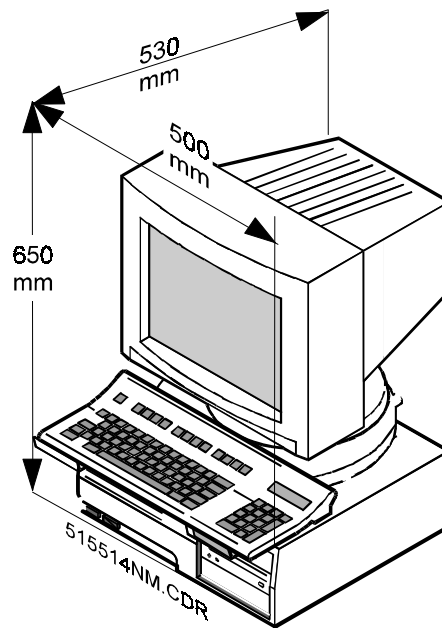
- PC: for dimensions refer to the "Technical Data" of the corresponding PC USER MANUAL.
- ID Tablet: dimensions (D x W x H): 42 x 46 x 7,5 cm.

ID Station inclusive Console, PC-Shelf and Cassette rack (options)

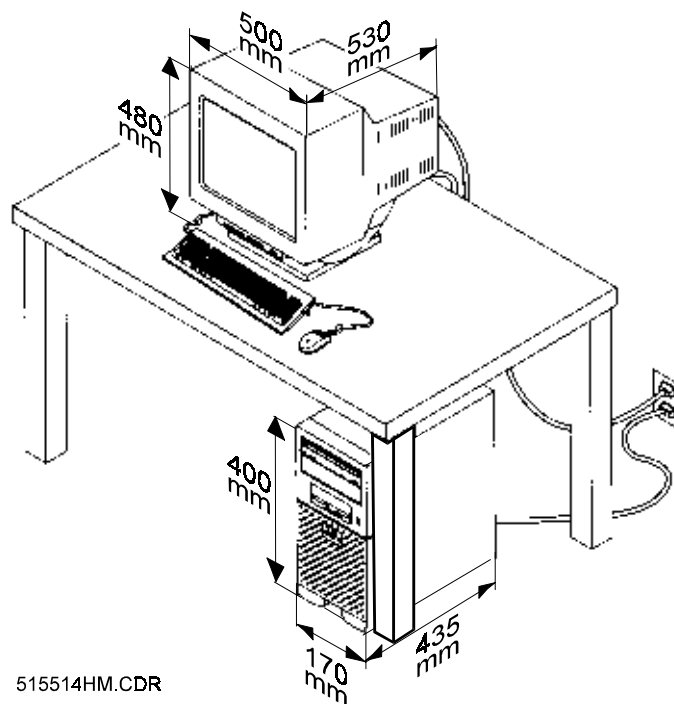


PRID

PR eviue + ID- Station on a single PC. Dimensions like ID-Station

Preview Station (PC)

For dimensions refer to the "Technical Data" of the corresponding PC USER MANUAL.

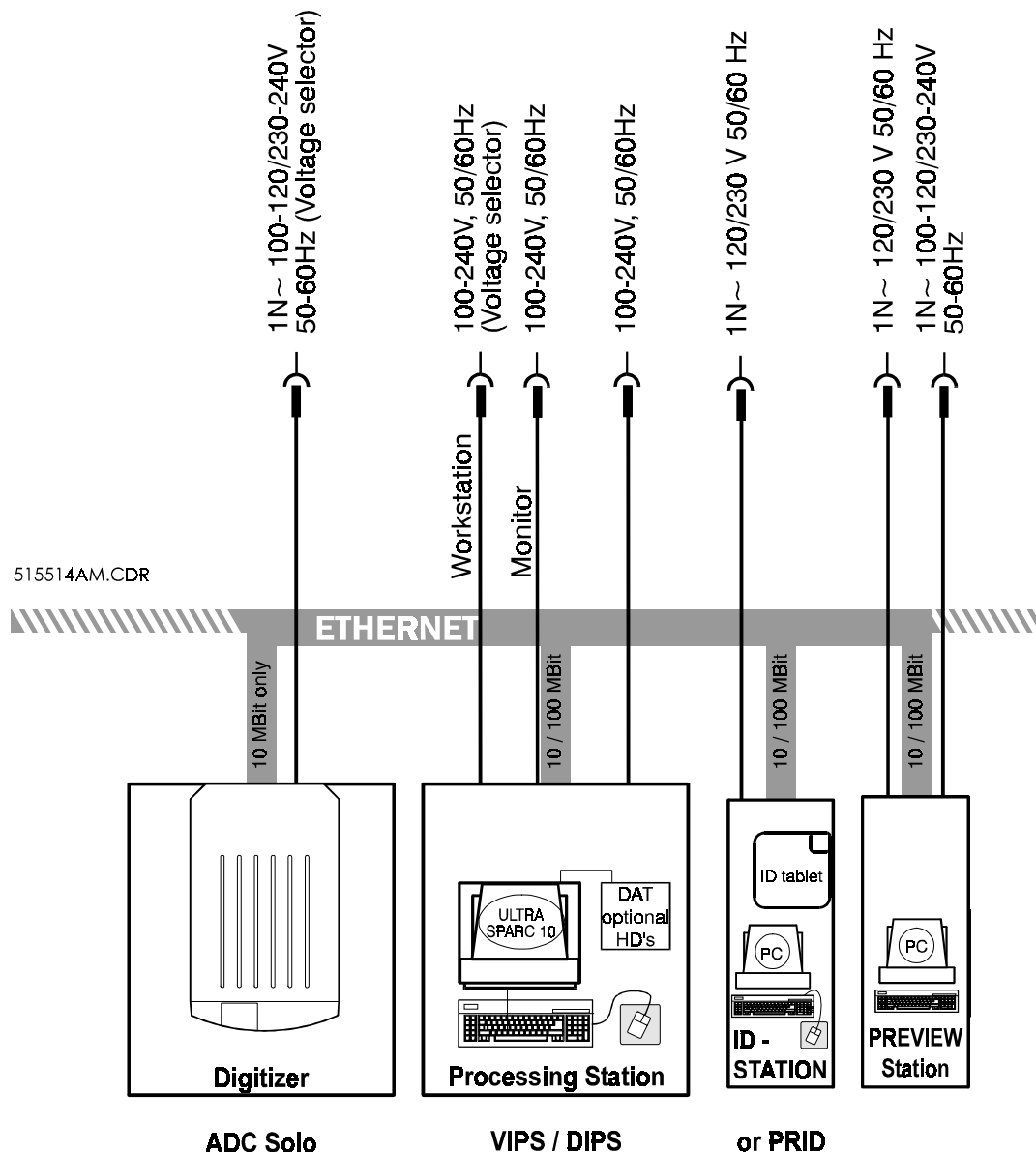
Processing Station (Ultra Sparc 10)

For dimensions refer to the "Technical Data" of the corresponding USER MANUAL.

Hardcopy printer

For dimensions refer to the respective Installation Planning Instructions!

Electrical connections of the system components



ADC Solo Digitizer

- 1x Outlet (Digitizer).
- Network connection: 10 MBit (Twisted pair only)
- Fix the ADC Solo port on the autoswitching Hub to 10 MBit, halfduplex

Processing Station

DIPS= Digital Image
Processing Station
VIPS= Viewing and Image
Processing Station

- minimum 3 outlets (WS, Monitor, DAT-Drive)
- strongly recommended: UPS (**U**ninterrupted **P**ower **S**upply) for the Workstation, Monitor and the external optional disk drives
- Network connection: 10 / 100 MBit (Twisted pair only), Autosensing

ID STATION

- 1x Outlet (Extension with multiple outlet for PC and ID Tablet).
- Network connection: 10 / 100 MBit (Twisted pair only)

PREVIEW STATION

- 2x Outlet (PC).
- Network connection: 10 / 100 MBit (Twisted pair only)

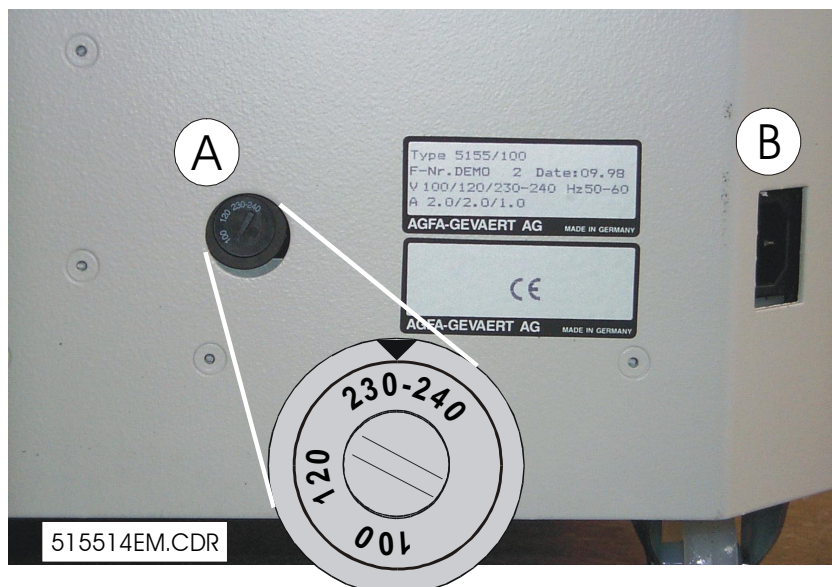
Remote Support Access

- Phone Plug (RJ45) **or** ISDN
- Power supply outlet

Mains connection:

Connection to an outlet	ID - Station	2 x 100 - 120 V / 230 - 240 V, 50 - 60 Hz
	Preview Station	100 - 120 V / 230 - 240 V, 50 - 60 Hz
	Processing Station	100 V / 120 V / 230 - 240 V, 50 - 60 Hz
	Digitizer	100 V / 120 V / 230 - 240 V, 50 - 60 Hz
External Fuse protection	ID - Station	min. 6 A slowblow, max. 16 A slowblow
	Preview Station	min. 6 A slowblow, max. 16 A slowblow
	Processing Station	min. 6 A slowblow, max. 16 A slowblow
	Digitizer	min. 6 A slowblow, max. 16 A slowblow
Connection cable	ID - Station	Country-specific power supply cables Country-specific extension with multiple outlet
	Preview Station	Country-specific power supply cables
	Processing Station	Country-specific power supply cables
	Digitizer	only US- plus Euro- Cable
Interface connections:	ID - Station	1x RS 232/9P for the ID tablet + 1x mouse 1x network connection (Twisted pair only)
	Preview Station	1x network connection (Twisted pair only) 1x RS 232/9P, reservation for an ID tablet + 1x mouse
	Processing Station	1x network connection (Twisted pair only)
	Digitizer	1x network connection (Twisted pair only)

ADC Solo Digitizer



A = Voltage adaption

B = Mains connection

Voltage adaption and connection of the power supply:

The voltage can be adapted to 100 / 120 / 230-240 V. Factory set to 230-240 V.

To prevent damage check the correct voltage adaption before connecting the mains supply cable!

If the voltage adaption is not correct, take a screw driver and turn the switch (A) to the right position.

Put in the correct mains cable (B) (delivered in the enclosure box)

Installation regulations: Electrical installations in the installation room must be in compliance with:
IEC 364 (VDE 0100) regulations for Europe
NEC for USA / Canada

GFCI s,

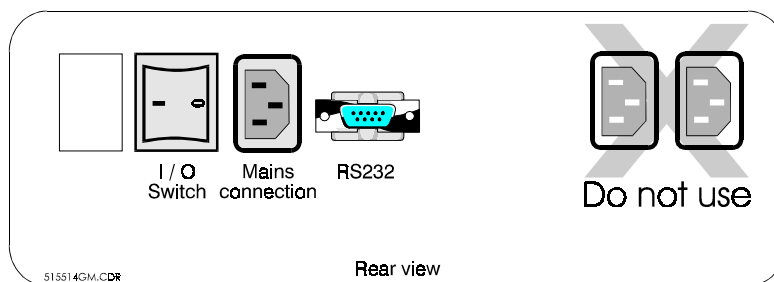
switch: Not compulsory but recommended.

Upon machine installations it must be ensured that either the mains connector of the respective machine or an all-pole circuit breaker for the installation on site is located close to the machines and easily accessible.



Plan ahead for possible repair that may be needed and use a cable length for power supply and Ethernet of at least 2.5 m in order that the machine can be moved away from the wall.

ID - Tablet



RS 232 cable length (ID-Tablet - PC): 2 m

Transport path for ADC Solo Digitizer

It must be possible to transport the digitizer through all hallways and doors up to the installation site.	Minimum doorwidth: 47 cm
Machine dimensions	75 cm x 45 cm
Packed on a pallet	80 cm x 100 cm
Minimum space for removal of the machine from the pallet	200 cm x 350 cm



Once the machine is unpacked it can be moved to the installation site on four mounted rollers.

Transport path for other ADC Solo System Components

It must be possible to transport the system components through all hallways and doors up to the installation site.	Minimum doorwidth: 60 cm
--	---------------------------------

Ambient conditions of the System component ADC Solo Digitizer

Noise level: max. 65 dB (A)

Room temperature: minimum 15°C, maximum 30°C

Heat emission: into the room during standby mode 400 W, maximum 1440 W.

Relative humidity: At a room temperature of 25 °C (minimal 15 %, maximal 75 %)

Effects of radiation: If the machine is located in the immediate vicinity of the X-ray room, it is imperative that the local radiation safety regulations are followed. (Protection of operative personnel against scattered radiation).

Installation in the X-ray room is only possible if a radiation protection wall is provided on site. Size and position of the radiation protection wall must be designed in such a way that the machine is neither exposed to direct radiation nor scattered radiation.

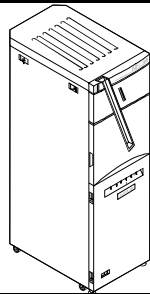
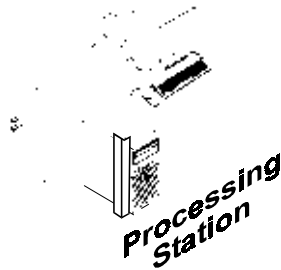
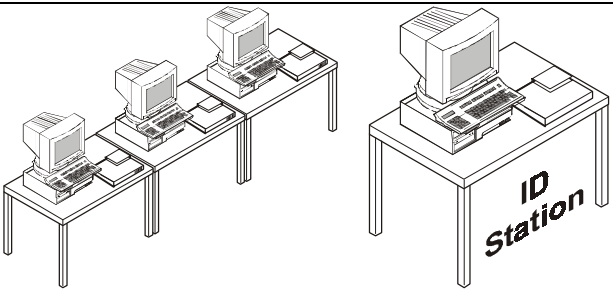
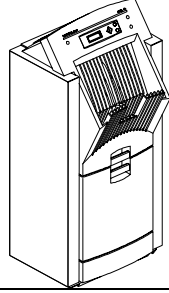
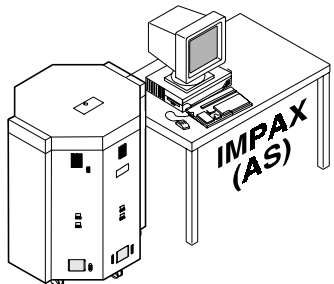
Max. permissible magn. field in the room: according to EN 61000-4-8 Level 5

Part 2: Network planning

Dedicated network for ADC Solo System

- The settings given in the shipment defaults (table below) can be taken directly.

Max. shipment configuration

hostname: adcs1 ip_addr.: 192.9.200.199 subnet_mask: default router: AE_title: ADCS1 StationName: ADCS1	
hostname: vips ip_addr.: 192.9.200.202 subnet_mask: default router: AE_title: VIPS StationName VIPS	
hostname: prid1 ip_addr.: 192.9.200.203 (- .206) subnet_mask: default router: AE_title: PREV1 (- PREV4) StationName PREV1 (- PREV4) AE_title: IDEN1 (- IDEN4) StationName IDEN1 (- IDEN4)	
hostname: mg1 ip_addr.: 192.9.200.201 subnet_mask: default router: AE_title: ADC_LR1 StationName: ADC_LR1	
hostname: simas1 ip_addr.: 192.9.200.101 subnet_mask: default router: AE_title: SIMAS1 StationName: IMPAX	

 main components



Only the components shown in the table above may be integrated in the network!

Integration into an existing / new network

- Ask the system-administrator for the IP-addresses (and hostnames). Fill in the form at the end of the section
- Change the configuration according to the network administrator before connecting to the network.



The given shipment configurations must not be used in this case

Part 3: Specifications

Delivery modalities

For Processing Station, Preview Station and ID Station, the software is separately available (without hardware).


Minimum Hard- and Software requirements

(if Hardware is purchased locally)

- **for the ID - Station and Preview Station:**

Hardware	Operating System
Pentium 200 Mhz <ul style="list-style-type: none"> • Floppy drive 3.5", 1.44 MB • CD ROM 644 MB • Monitor 17" SVGA • 64 MB RAM • 512 KB Cache • Harddisk \geq 4 GB • 64 bit graphical SVGA controller with 2 MB DRAM • Countryspecific keyboard + mouse • 1x RS232 output, reserved for ID Tablet (COM1, 9PIN SUB D) • 1x RS232 output for serial mouse (COM2) • Ethernet controller. Recommended 3 COM combo box 	Windows NT 4.0 Workstation ServicePack 3 Languages: English, German, French, Danish, Spanish, Finnish, Italian, Dutch, Norwegian, Potuguese and Swedish. In any other cases English is recommended.

- **for the Processing Station:**

Hardware	Operating System
SUN ULTRA SPARC 10 <ul style="list-style-type: none"> • 333 MHz ULTRA SPARC CPU • 256 MB RAM • 512 KB Cache • Floppy drive 3.5", 1.44 MB • CD-ROM Drive 24x (EIDE) • Hard disk (4.3 GB EIDE, internal)) • 10/100 MB onboard Ethernet connection (RJ45, auto sensing)  Network connector: RJ45 for Twisted pair. For connection to BNC a HUB is necessary. • Onboard graphics board. • PCI-SCSI Interface (Wide SCSI board), single ended, for tape streamer and additional external SCSI hard disks with two SCSI cables included. • External tape streamer 	SOLARIS 2.6 The ULTRA SPARC 10 (PCI BUS based) is only supported by SOLARIS 2.6. or higher SOLARIS 2.6 is enclosed in the MIMOSA CD DIPS1.0.05

Type overview

ABC code	Type number	Machine designation
39WPR	5155 / 100	ADC Solo Digitizer *
36743	4406 / 821	<ul style="list-style-type: none"> • ID Station *, preconfigured system • ADC ID - Tablet • ID Station Software Options: <ul style="list-style-type: none"> - ADC Console - ADC Cassette rack - PC-Shelf
37QUU	4406 / 841	
37J2F	4406 / 745	
37J4K	4406 / 831	
36755	4406 / 851	
37QVW	4406 / 910	
36767	LASP6 / 009	<ul style="list-style-type: none"> • ADCC Processing server HW *, preconfigured system • ADCC Autoprocessing software Options: <ul style="list-style-type: none"> - ADCC Interactive processing SW - ADCC UPS 230 V (Uninterrupted power supply) - ADCC UPS 110 V (Uninterrupted power supply) - External harddisk 1 x 9 GB with SCSI cable 68P-68P - External harddisk 2 x 9 GB with SCSI cable 68P-68P - 64 MB memory extension - ADC high brightness 1K Monitor (IMAGE SYSTEM MONITOR) - ADC high brightness 1K Monitor (SIEMENS)
37J5M	4406 / 760	
37J6O	**	
368CN	UPSPS / ADC	
EA881	**	
39EZB	**	
39E1D	**	
368GV	**	
368BL	4406 / 871	
3678C	4406 / 861	
36743	4406 / 821	
37J3H	4406 / 720	

*) see scope of delivery

**) not yet defined

Scope of delivery

ADC Solo Digitizer (for 100V / 120V 230-240V, 1N~, 50-60 Hz)

- 1x ADC Solo Digitizer
- 2x mains cable (1x US- connector, 1x Euro-DIN connector)
- 1x CU-Filter
- 1x UTP-Cable 5m
- 6x Floppy Disk (3x Release floppy, 1x Boot floppy, 1x Backup, 1x Language)

Processing Station (Viewing and **I**mage **P**rocessing **S**tation)

- 1x Sun Workstation
- 1x Sun Country Kit (Keyboard, Mouse, 2x Country specific mains cable)
- 1x DAT-Drive (Tapestreamer) with mains cable
- 1x Cable BNC to VGA, 1x UTP-Ethernet Cable 3m, 2x SCSI-Cable (DAT-Drive, external Harddisk-Drive)
- 1x MIMOSA CD-ROM for VIPS (Application - Solaris), 1x Floppy (language files), CD-ROMs with Information from SUN
- 1x ADC Compact Basic System User Manual
- 1x License card

Preview Station

- 1x PC, Monitor, Keyboard, Mouse (Countryspecific)
- 2x mains cable (PC, Monitor)
- 1x UTP-Ethernet Cable 15m
- Software:**
- 1x PRID - CD-ROM
- 1x Windows NT4 Workstation
- 1x Windows NT Service Pack 3
- 1x Compact Restore CD
- 1x Floppy (language files)
- 2x Floppy (Network / Video Driver)
- 1x User Manual
- 1x License Card
- Software packages see below

ID Station

- 1x PC, Monitor, Keyboard, Mouse (Country-specific)
- 2x mains cable (PC, Monitor)
- 1x UTP-Ethernet Cable 15m
- 1x ID-Tablet (incl. Standard mains cable)
- 1x RS 232 cable
- 1x Extension with multiple outlet

Software:

- 1x PRID - CD-ROM
- 1x Windows NT4 Workstation
- 1x Windows NT Service Pack 3
- 1x Compact Restore CD
- 1x Floppy (language files)
- 2x Floppy (Network / Video Driver)
- 1x User Manual
- 1x License Card
- Software packages see below

Hardware Options for ID Station / PRID

- Console
- Cassetterack
- PC- Shelf

Hardware Options for Processing Station (DIPS/VIPS)

- external Harddisk-Drive (incl. mains cable)
- UPS (incl. 1x mains cable, 4x Jumper-Cable, 2x serial cable + adapter, 1x User Manual)

Software-Options: each package (one box) contains

- 1x CD-ROM
- 1x AGFA User Manual
- 1x License Card

Connection cables of the individual system components

Following Network components may be ordered separately

ABC code.	Network cable	Length
31D3F	UTP-cable, (unshielded twisted pair connection cable for ethernet 10 base-T)	5 m
31D4H	UTP-cable, (unshielded twisted pair connection cable for ethernet 10 base-T)	50 m
31D5K	UTP-cable, (unshielded twisted pair connection cable for ethernet 10 base-T)	100 m

ABC code.	Hub
398JQ	HUB (Twisted pair, BNC)



- External connection cables of the system components are to be installed prior to the installation of the ADC Solo System.

Electrical Data:**Power consumption :**

• ADC Solo Digitizer	Type 5155/100:	100 V	15 A
		120 V	12 A
		230 - 240 V	7 A
• ID -STATION	PC incl. Monitor	120 V	3 A
		230 V	1,6 A
	ID Tablet		5 A
• Processing Station	Workstation incl. Monitor	120 V	4 A
		230 V	2 A
• Preview Station	PC incl. Monitor	120 V	3 A
		230 V	1,6 A

Leakage current toward earth connection

• ADC Solo Digitizer	Type 5155/100:	$\leq 3,5 \text{ mA}$
-----------------------------	----------------	-----------------------

Packing dimensions:

ADC Solo Digitizer	L x W x H: 80 x 100 x 160 cm
ID Station incl. ID Tablet: 17" Monitor: Console: Rack:	L x W x H: 33 x 58 x 55 cm L x W x H: 58 x 58 x 54 cm L x W x H: 84 x 84 x 143 cm L x W x H: 48 x 44 x 29 cm
Processing Station incl. standard brightness monitor	L x W x H: 80 x 120 x 90 cm
Processing Station incl. high brightness monitor	L x W x H: 80 x 120 x 90 cm
Preview Station	L x W x H: 58 x 58 x 54 cm

Weights:

ADC Solo Digitizer	with box:	$\approx 275 \text{ kg}$
	without box:	$\approx 215 \text{ kg}$
ID Tablet:	with box:	$\approx 13 \text{ kg}$
	without box:	$\approx 9 \text{ kg}$
Cassette rack:	with box:	$\approx 7 \text{ kg}$
	without box:	$\approx 6 \text{ kg}$
ID-Console	with box:	$\approx 43 \text{ kg}$
	without box:	$\approx 21 \text{ kg}$
Processing Station with standard monitor	with box:	$\approx 40 \text{ kg}$
	without box:	$\approx 32 \text{ kg}$
Processing Station with high brightness monitor	with box:	$\approx 80 \text{ kg}$
	without box:	$\approx 60 \text{ kg}$
Preview Station / ID-Station PC	with box:	$\approx 25 \text{ kg}$
	without box:	$\approx 20 \text{ kg}$

Climatic data

Noise level: max. 65 dB (A)

Room temperature: minimum 15°C, maximum 30°C

Heat emission: into the room during standby mode 400 W, maximum 1440 W.

Relative humidity: At a room temperature of 25 °C (minimal 15 %, maximal 75 %)

Effects of radiation: If the machine is located in the immediate vicinity of the X-ray room, it is imperative that the local radiation safety regulations are followed.
(Protection of operative personnel against scattered radiation).

Installation in the X-ray room is only possible if a radiation protection wall is provided on site. Size and position of the radiation protection wall must be designed in such a way that the machine is neither exposed to direct radiation nor scattered radiation.

Max. permissible magn. field in the room: according to EN 61000-4-8 Level 5

Safety regulations

Important note:

According to EN 60601-1, this equipment is not classified as a „medical electrical equipment“.

The system components ADC Solo Digitizer and the ID Tablet are tested in compliance with:

- EN 60950 / IEC 950 / VDE 0805/11.97
- EN 60825 - 1 :1994
- UL 1950
- CSA 22.2 No. 950

TÜV Approval Certificate
UL / CUL-approved



**The ADC Solo Digitizer is in compliance with
EG regulation 93/42/EEC (Medical device)**

Radio interference suppression:

It is hereby certified that the ADC Solo Digitizer has interference suppression according to EN 55011 Class B as well as FCC Rules CR47 Part 15 Class A (North-America).

Warning:

This equipment generates uses and can radiate radio frequency energy and if not installed and used in accordance with the instruction manual, may cause interference to radio communication. It has been tested and found to comply with the limits for a Class A computing device pursuant to Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in an residential area is likely to cause interference in which case the user at his own expense will be required to take whatever measures may be required to correct the interference.

Calibration regulations: Only applies to the Federal Republic of Germany at this time.

Upon installation and maintenance work on the processor the provisions of the X-ray regulations (§ 16 Sec. 1) with respect to the final inspection test by the manufacturer or supplier must be considered.

Checklists for the responsible installation person

In order to avoid any unnecessary delays during the installation and the machine start-up, the following points of the checklist below should be carried out prior to the installation.

Check and discuss all the required measures for the installation by means of this checklist. Remarks on the individual items may be made on the back of the list.

We ask you to give this checklist then to your local A-G representative.

Customer:

Department:

**System
components:**

.....

.....

.....

.....


Desired installation date:

Signed:

Signature

Remarks:

Checklist

Required external connections:			Prepared: yes no		
1	ID Station / PRID	<ul style="list-style-type: none"> • 1 outlet (PC and ID tablet) • Ethernet connection (Twisted pair) prepared, 	<input type="checkbox"/>	<input type="checkbox"/>	
2	ADC Solo Digitizer	<ul style="list-style-type: none"> • 1 outlet • Ethernet connection (Twisted pair) prepared 	<input type="checkbox"/>	<input type="checkbox"/>	
3	Processing Station	<ul style="list-style-type: none"> • UPS (uninterrupted power supply) required ? • Outlets Without UPS: <ul style="list-style-type: none"> - min. 2 outlets + 1 outlet / optional external harddisk • Outlets With UPS: <ul style="list-style-type: none"> - 1 outlet • Ethernet connection (Twisted pair) prepared 	<input type="checkbox"/>	<input type="checkbox"/>	
4	Preview Station	<ul style="list-style-type: none"> • 2 outlets • Ethernet connection (Twisted pair) prepared 	<input type="checkbox"/>	<input type="checkbox"/>	
5	Remote Support Access	• Phone Plug (RJ45) or ISDN	<input type="checkbox"/>	<input type="checkbox"/>	
6	Hardcopy printer available via network	See separate Installation Planning Instructions	<input type="checkbox"/>	<input type="checkbox"/>	
General					
	 Transport to the installation site, unpacking and removal of the machine from the pallet may be done by the carrier.				
7	Transport path (≥60 cm) for the ADC Solo System components: Way:			<input type="checkbox"/>	<input type="checkbox"/>
8	Free space for the machine removal from the pallet defined? (5 x 1 m) Place:			<input type="checkbox"/>	<input type="checkbox"/>
9	For the connection of the System components to the local network please plan an appointment concerning network configuration with the local network administrator.			<input type="checkbox"/>	<input type="checkbox"/>
10	Fix IP-addresses, if the system has to be integrated in an existing network (see following table)			<input type="checkbox"/>	<input type="checkbox"/>

Form to fill in the Network Parameter

Digitizer	Example	1 st Digitizer	2 nd Digitizer	Remarks
hostname	adcs1			
ip_addr.	192.9.200.199			
Subnet_mask				
default router				
AE_title	ADCS1			
Station Name *	ADCS1			

Processing Station	Example	1 st Processing Station	2 nd Processing Station	Remarks
hostname	vips			
ip_addr.	192.9.200.202			
subnet_mask				
default router				
AE_title	VIPS			
Station Name *	VIPS			

PRID - Station	Example	1 st PRID - Station	2 nd PRID - Station	Remarks
hostname	prid1			
ip_addr.	192.9.200.203			
Subnet_mask				
default router				
AE_title	PREV1			
Staton Name	PREV1			
AE_title	IDEN1			
Station Name *	IDEN1			

☐ main components

Preview Station	Example	1 st Preview Station	2 nd Preview Station	Remarks
hostname	prev206			
ip_addr.	192.9.200.206			
Subnet_mask				
default router				
AE_title	PREV206			
Station Name *	PREV206			

HardCopyPrinter	Example	1 st HCP	2 nd HCP	Remarks
hostname	mg1			
ip_addr.	192.9.200.201			
Subnet_mask				
default router				
AE_title	ADC_LR1			
Station Name *	ADC_LR1			

ID - Station	Example	1 st ID-Station	2 nd ID-Station	Remarks
hostname	id207			
ip_addr.	192.9.200.207			
Subnet_mask				
default router				
AE_title	ID207			
Station Name *	ID207			

PACS Archive Station	Example	1 st Archive Station	2 nd Archive Station.	Remarks
hostname	simas1			
ip_addr.	192.9.200.101			
Subnet_mask				
default router				
AE_title	SIMAS1			
Station Name *	IMPAX			

*) Friendly name (Station name) appears in the USER interface

Site

filled in by

Date

AGFA and the Agfa-Rhombus are trademarks of Agfa-Gevaert AG, Germany

Herausgegeben von / Published by / Edité par

Agfa-Gevaert AG
Fototechnik
Tegernseer Landstraße 161
D - 81539 München

Printed in Germany / Imprimé en Allemagne

